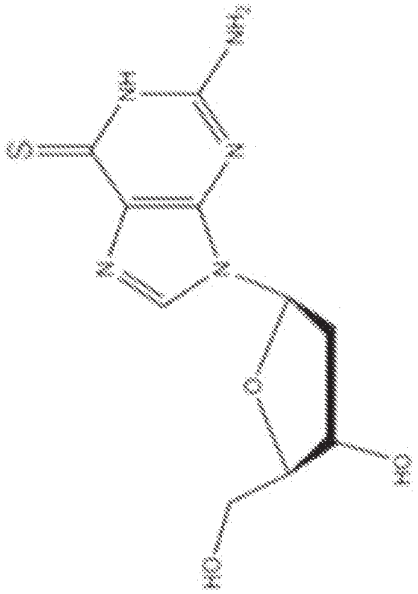
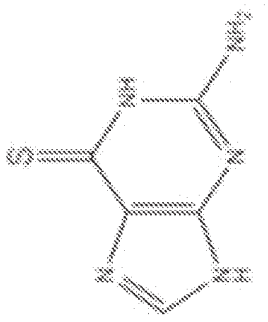


6-thio-2'-deoxyguanosine



6-thioguanine

FIG. 1A

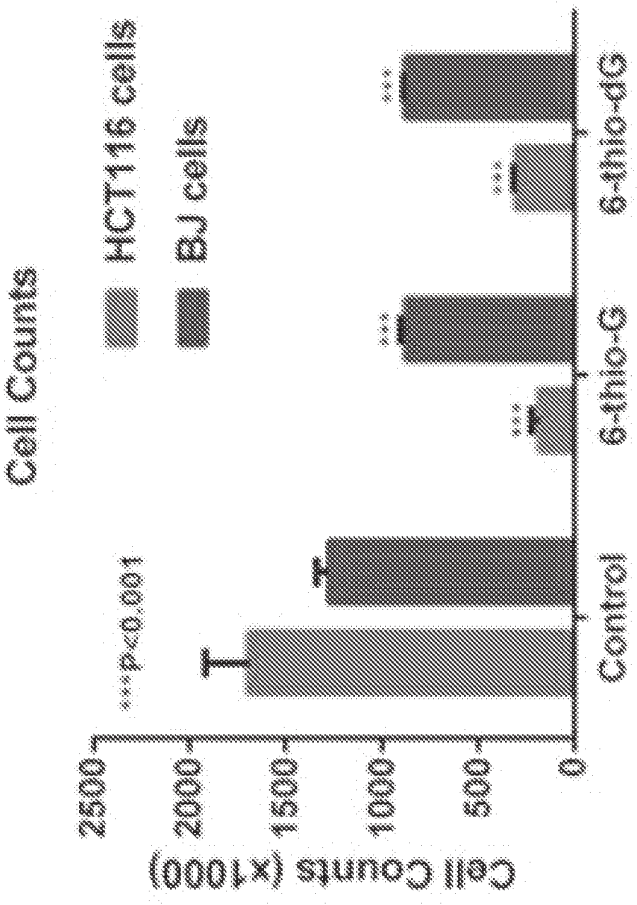

Cell Counts
HCT116 cells
BJ cells
***P<0.001
Cell Counts (x1000)
2500
2000
1500
1000
500
0
***
***
***
***
Control
6-thio-G
6-thio-dG

FIG. 1B

Week / Sample	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Control	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
A	Im	Im	Im	Im	Im	Im	Im	Im	Im	Im	Im					
B	6-dG	6-dG	6-dG	6-dG	6-dG	6-dG	6-dG	6-dG	6-dG	6-dG	6-dG	6-dG				
C	6-dG	6-dG	6-dG	6-dG	6-dG	6-dG	6-dG	6-dG	6-dG	6-dG	6-dG	6-dG	6-dG	6-dG		
D	6-dG	6-dG	6-dG	6-dG	6-dG	6-dG	6-dG	6-dG	6-dG	6-dG	6-dG	6-dG	6-dG	6-dG	6-dG	6-dG
E	6-dG	6-dG	6-dG	6-dG	6-dG	6-dG	6-dG	6-dG	6-dG	6-dG	6-dG	6-dG	--	--		
F	6-dG	6-dG	6-dG	6-dG	6-dG	6-dG	6-dG	6-dG	6-dG	6-dG	6-dG	6-dG	--	--	--	--
G	6-dG	6-dG	6-dG	6-dG	6-dG	6-dG	6-dG	6-dG	6-dG	6-dG	6-dG	6-dG	combo	combo		
H	6-dG	6-dG	6-dG	6-dG	6-dG	6-dG	6-dG	6-dG	6-dG	6-dG	6-dG	6-dG	combo	combo	combo	combo
I	6-dG	6-dG	6-dG	6-dG	6-dG	6-dG	6-dG	6-dG	6-dG	6-dG	6-dG	6-dG	Im	Im		
F	6-dG	6-dG	6-dG	6-dG	6-dG	6-dG	6-dG	6-dG	6-dG	6-dG	6-dG	6-dG	Im	Im	**Im**	**Im**

FIG. 2

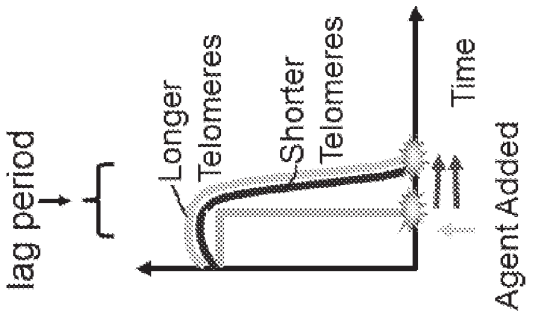

lag period
Longer Telomeres
Shorter Telomeres
Time
Agent Added

FIG. 3B

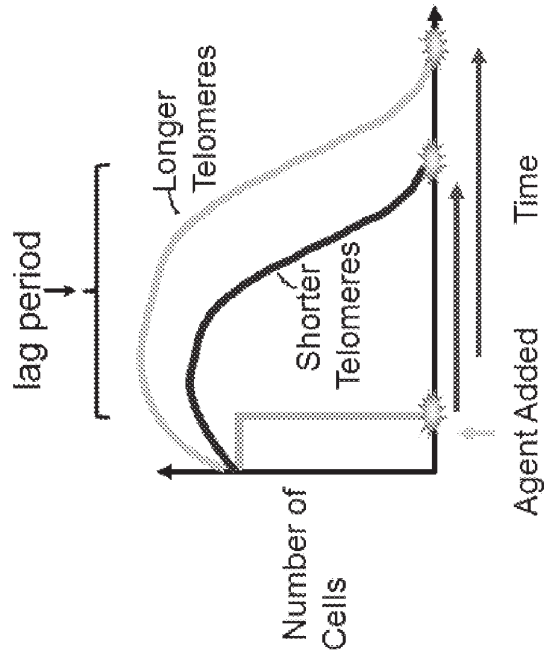

lag period
Longer Telomeres
Shorter Telomeres
Number of Cells
Agent Added
Time

FIG. 3A

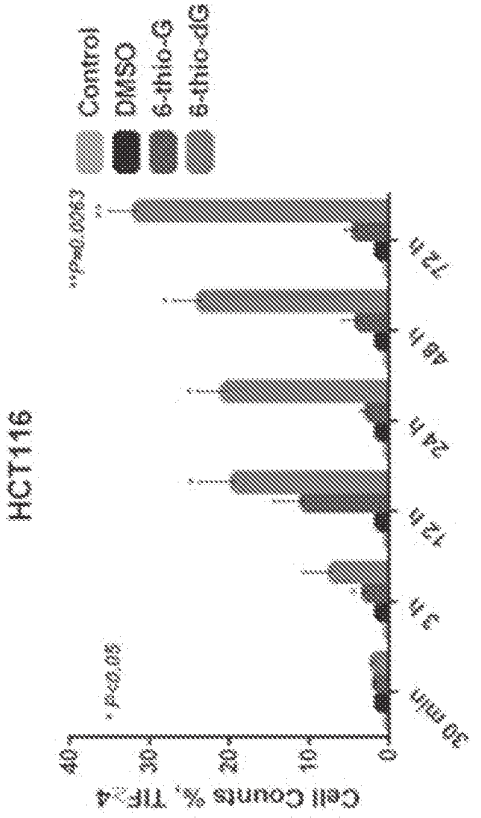

HCT116
Cell Counts % TIF2A
Control
DMSO
6-thio-G
6-thio-dG
30 min
3 h
12 h
24 h
48 h
72 h
Time points

FIG. 5

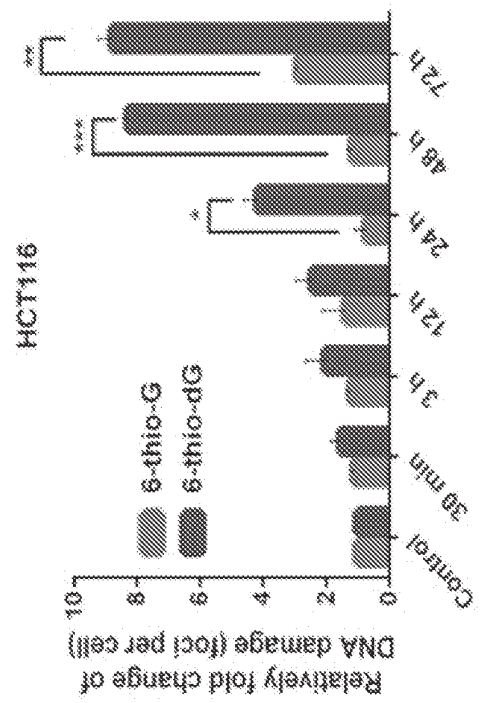

HCT116
Relatively fold change of DNA damage (foci per cell)
6-thio-G
6-thio-dG
Control
30 min
3 h
12 h
24 h
48 h
72 h
Time points

FIG. 4

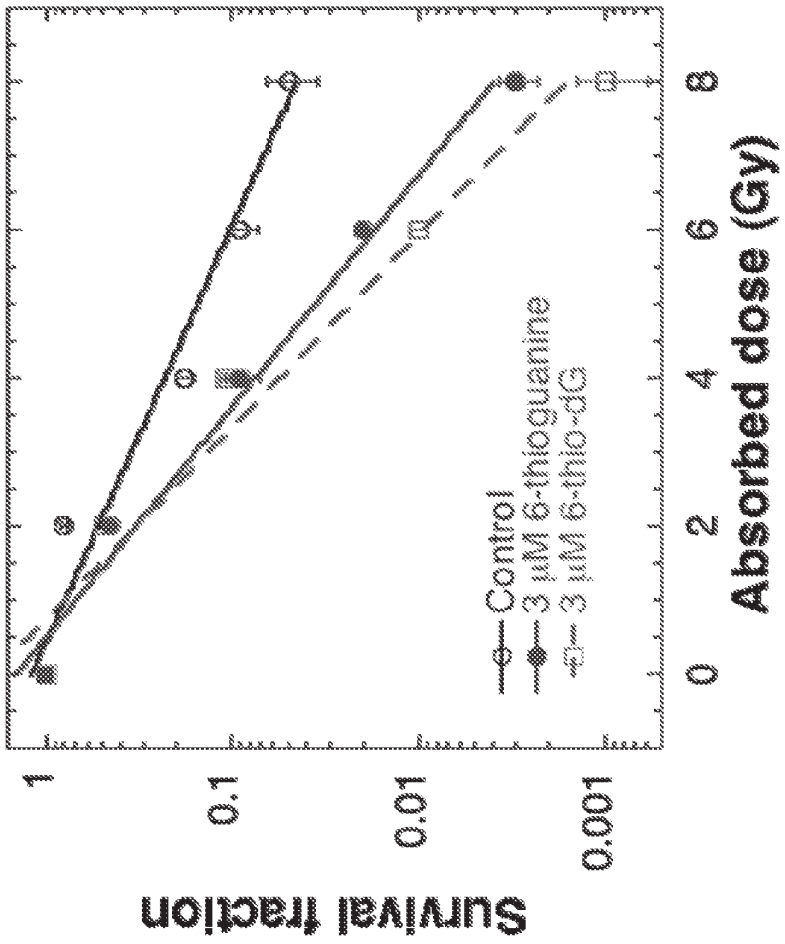

Survival fraction
1
0.1
0.01
0.001
0
2
4
6
8
Absorbed dose (Gy)
Control
3 μM 6-thioguanine
3 μM 6-thio-dG

FIG. 6A

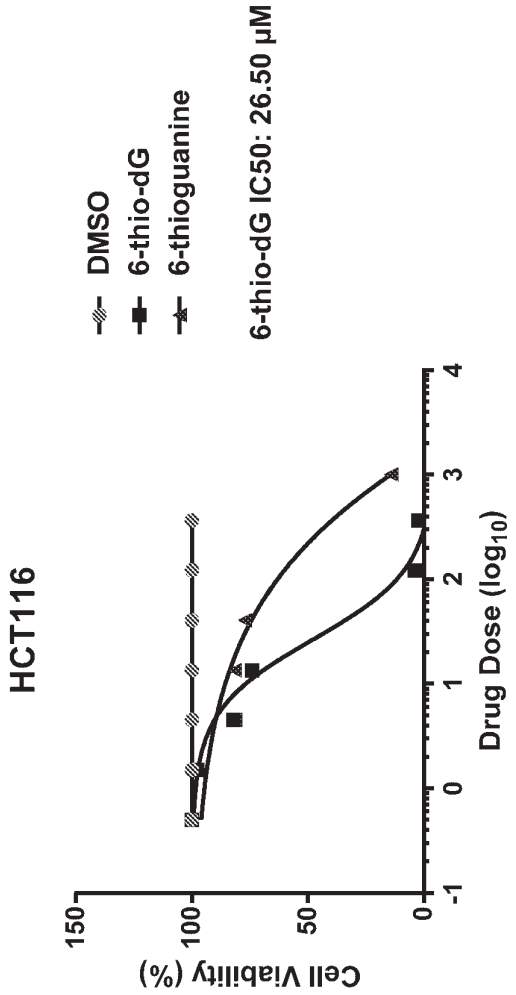

HCT116
DMSO
6-thio-dG
6-thioguanine
6-thio-dG IC50: 26.50 µM
Cell Viability (%)
150
100
50
0
-1
0
1
2
3
4
Drug Dose (log10)

FIG.6B

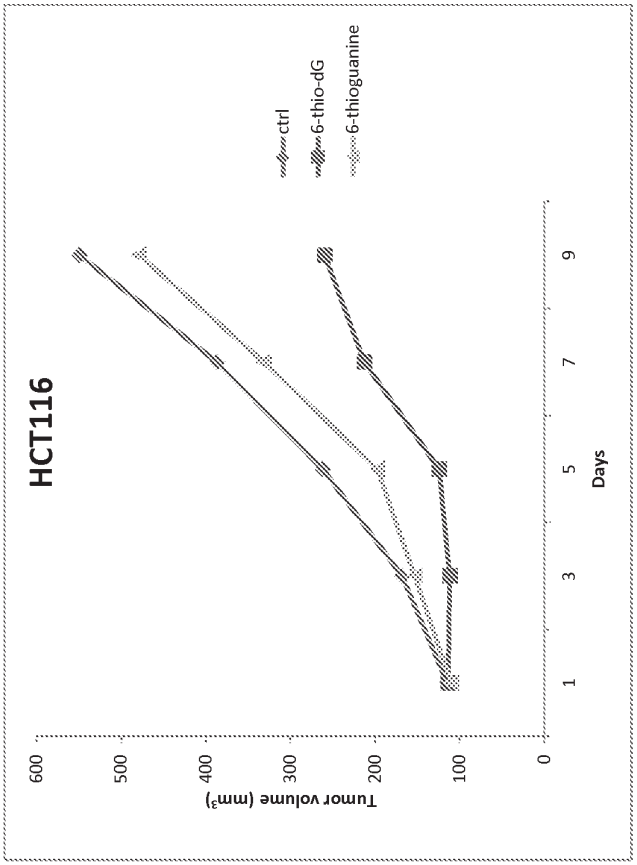

HCT116
ctrl
6-thio-dG
6-thioguanine
Tumor volume (mm³)
600
500
400
300
200
100
0
1
3
5
7
9
Days

FIG. 7A

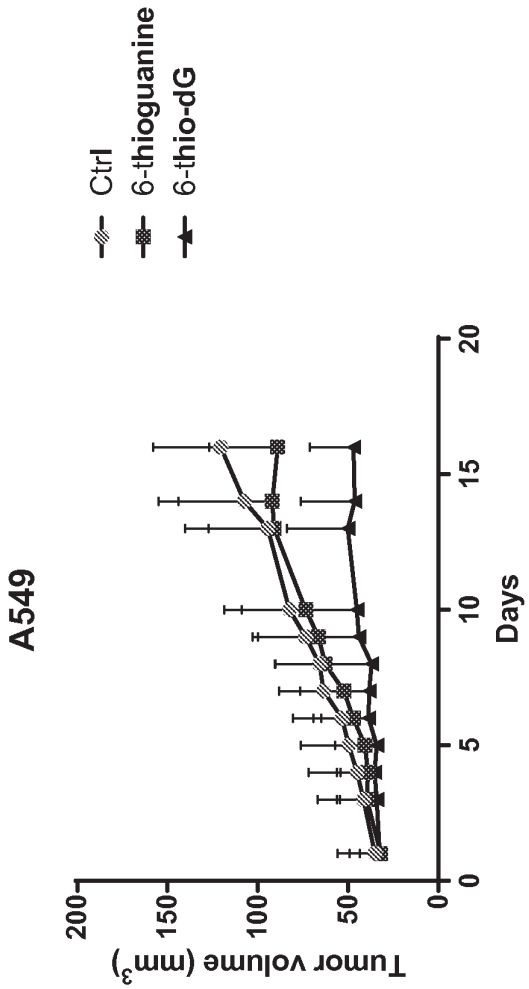

A549
Ctrl
6-thioguanine
6-thio-dG
Tumor volume (mm3)
200
150
100
50
0
0
5
10
15
20
Days

FIG. 7B

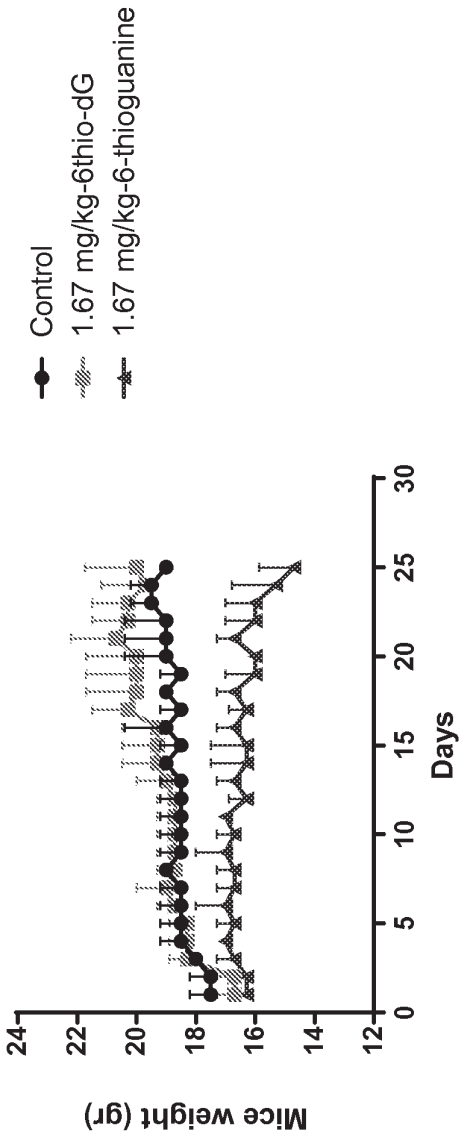

Control
1.67 mg/kg-6thio-dG
1.67 mg/kg-6-thioguanine
Mice weight (gr)
Days
24
22
20
18
16
14
12
0
5
10
15
20
25
30

FIG. 8A

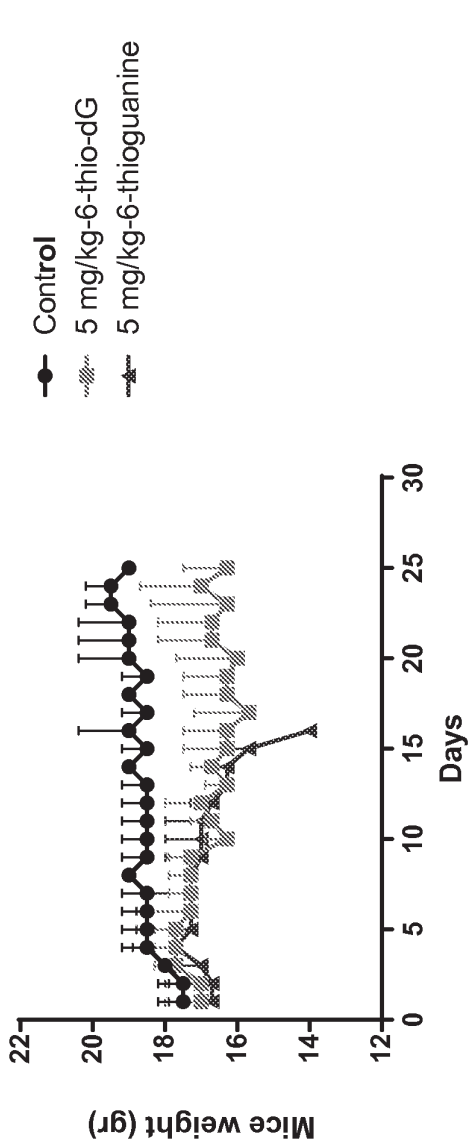

Control
5 mg/kg-6-thio-dG
5 mg/kg-6-thioguanine
Mice weight (gr)
Days
22
20
18
16
14
12
0
5
10
15
20
25
30

FIG. 8B